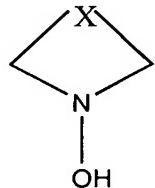


LISTING OF CLAIMS:

1. (Original) A method for inhibiting the polymerisation of one or more ethylenically unsaturated monomers selected from the group consisting of: styrene, α -methylstyrene, styrene sulphonic acid, vinyltoluene, divinylbenzenes, polyvinylbenzenes, alkylated styrene, 2-vinylpyridine, acrylonitrile, methacrylonitrile, methyl acrylate, ethyl acrylate, methyl methacrylate, ethyl methacrylate, acrylic acid, and methacrylic acid; by adding to the monomers an effective amount sufficient to inhibit polymerisation of a non-hindered cyclic hydroxylamine, alone or in combination with an additional inhibitor.
2. (Original) A method as claimed in claim 1, wherein the non-hindered cyclic hydroxylamine has no alkyl or other substituents alpha to the hydroxylamine group.
3. (Original) A method as claimed in claim 2, wherein the cyclic hydroxylamine has the formula (1).



wherein X is a group selected from $(CH_2)_mY(CH_2)_n$ where m and n are each independently an integer from 0 to 5 and Y is a CH₂, or hetero atom such as O, S or NH and wherein one or more CH₂ is optionally substituted with one or more C₁ to C₅ alkyl groups, (CH₂)_r-CH=CH-(CH₂)_s where r and s are independently integers from 0 to 3, optionally substituted with one or more C₁ to C₅ alkyl groups.

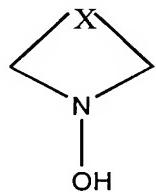
4. (Original) A method as claimed in claim 3 wherein the cyclic hydroxylamine is selected from the group consisting of 1-hydroxypiperidine, 4-hydroxymorpholine, 1-hydroxypyrrrolidine, 1-hydroxyazetidine, 1-hydroxy-2,5-dihydropyrrole, 1-hydroxyhexamethylene imine and 1-hydroxyazocan.

5. (Original) A method as in claim 2 wherein the cyclic hydroxylamine is selected from the group consisting of 1-hydroxy-2,3,4-trihydroquinoline, 9-hydroxycarbazole and 1-hydroxy-2,3-dihydroindole, optionally substituted with one or more C₁ to C₅ alkyl groups and mixtures thereof.
6. (Original) A method as claimed in claim 4, wherein the hydroxylamine is selected from the group consisting of: 1-hydroxypiperidine, 4-hydroxymorpholine and mixtures thereof.
7. (Previously Presented) A method as claimed in claim 1, wherein the additional inhibitor is selected from the group consisting of phenols, nitrosophenols, nitrophenols, substituted nitrophenols, quinones, stable free radicals and phenylene diamines.
8. (Original) A method as claimed in claim 7, wherein the additional inhibitor is selected from the group consisting of: 2,4-dinitrophenol, 4,6-dinitro-o-cresol, 2,6-dinitro-p-cresol, 2-secbutyl-4,6-dintrophenol, tempo, 4-hydroxytempo, 4-oxotempo, 4-aminotempo and 4-methoxytempo.
9. (Previously Presented) A method as claimed in claim 1, wherein the amount of additional inhibitor in the range from a trace of 96% by weight of the total amount of inhibitor.
10. (Original) A method as claimed in claim 9, wherein the amount of additional inhibitor is 40 to 96% by weight of the total amount of inhibitor.
11. (Currently Amended) A method as claimed in ~~any preceding~~ claim 1 wherein the ethylenically unsaturated monomer is styrene.
12. (Previously Presented) A method as claimed in claim 1, wherein the non-hindered cyclic hydroxylamine is 1-hydroxypiperidine or 4-hydroxymorpholine.
13. (Previously Presented) A polymerisation inhibitor composition comprising an ethylenically unsaturated monomer selected from the group consisting of: styrene, α-methylstyrene, styrene sulphonic acid, vinyltoluene, divinylbenzenes, polyvinylbenzenes, alkylated styrene, 2-vinylpyridine, acrylonitrile, methacrylonitrile, methyl acrylate, ethyl

acrylate, methyl methacrylate, ethyl methacrylate, acrylic acid, and methacrylic acid; and an effective amount sufficient to inhibit polymerisation of a non-hindered cyclic hydroxylamine, alone or in combination with an additional inhibitor.

14. (Previously Presented) An inhibitor as claimed in claim 13, wherein the non-hindered cyclic hydroxylamine has no alkyl or other substituents alpha to the hydroxylamine group.

15. (Original) An inhibitor as claimed in claim 14, wherein the cyclic hydroxylamine has the formula (1).



wherein X is a group selected from $(CH_2)_m Y (CH_2)_n$ where m and n are each independently an integer from 0 to 5 and Y is a CH₂, or hetero atom such as O, S or NH and wherein one or more CH₂ is optionally substituted with one or more C₁ to C₅ alkyl groups, (CH₂)_r-CH=CH-(CH₂)_s where r and s are independently integers from 0 to 3, optionally substituted with one or more C₁ to C₅ alkyl groups.

16. (Original) An inhibitor as claimed in claim 15 wherein the cyclic hydroxylamine is selected from the group consisting of: 1-hydroxypiperidine, 4-hydroxymorpholine, 1-hydroxypyrrrolidine, 1-hydroxyazetidine, 1-hydroxy-2,5-dihydropyrrole, 1-hydroxyhexamethylene imine and 1-hydroxyazocan.

17. (Original) An inhibitor as in claim 16 wherein the cyclic hydroxylamine is selected from the group consisting of 1-hydroxy-2,3,4-trihydroquinoline, 9-hydroxycarbazole and 1-hydroxy-2,3-dihydroindole, optionally substituted with one or more C₁ to C₅ alkyl groups and mixtures thereof.

18. (Original) An inhibitor as claimed in claim 16, wherein the hydroxylamine is selected from the group consisting of: 1-hydroxypiperidine, 4-hydroxymorpholine and mixtures thereof.

19. (Previously Presented) An inhibitor as claimed in claim 13, wherein the additional inhibitor is selected from the group consisting of: phenols, nitrosophenols, nitrophenols, substituted nitrophenols, quinones, stable free radicals and phenylene diamines.

20. (Original) An inhibitor as claimed in claim 19, wherein the additional inhibitor is selected from the group consisting of: 2,4-dinitrophenol, 4,6-dinitro-o-cresol, 2,6-dinitro-p-cresol, 2-secbutyl-4,6-dintrophenol, tempo, 4-hydroxytempo, 4-oxotempo, 4-aminotempo and 4-methoxytempo.

21. (Previously Presented) An inhibitor as claimed in claim 13, wherein the amount of additional inhibitor in the range from a trace of 96% by weight of the total amount of inhibitor.

22. (Original) An inhibitor as claimed in claim 21, wherein the amount of additional inhibitor is 40 to 96% by weight of the total amount of inhibitor.

23. (Previously Presented) An inhibitor as claimed in claim 15, wherein the ethylenically unsaturated monomer is styrene.

24. (Previously Presented) An inhibitor as claimed in claim 15 wherein the non-hindered cyclic hydroxylamine is 1-hydroxypiperidine or 4-hydroxymorpholine.